

Peachtree Charter Middle School

Teacher:	FREEMAN		Week of: Sept 25-29	The Cell in Action Chapter 4			
Co-Teacher/Para:							
Course:	Life Science		Unit Name: The Cell in Action				
Priority Standards: (content specific)	S7L2.Obtain, evaluate, and communicate information to describe how cell structures, cells, tissues, organs, and organ systems interact to maintain the basic needs of organisms.						
Supporting Standards: (content specific)	S7L3.a Explain the role of genes and chromosomes in the process of inheriting a specific trait.						
Non-Content Standards: (WIDA, Interdisciplinary standards, literacy, etc.)	M7A1.a Translate verbal phrases to algebraic expressions M7P4.c Recognize and apply mathematics in contexts outside of mathematics.						
Learning Targets: (what learners will be able to do at the end of the learning activity)	The intent is for students to demonstrate how the component structures of the cell interact and work together to allow the cell as a whole to carry out various processes. Students will understand how the solar energy and photosynthesis is necessary for life.						
Essential Question(s): (addresses philosophical foundations; contains multiple answers; provide inquiry)	What is diffusion? How does osmosis occur? How are active and passive transport different? The same? How do particles get inside and out of the cell?						
Big Idea(s): (main ideas, foundational understandings, conclusions or generalizations)	Cells contain organelles that work together to carry out functions that allow the cell to obtain nutrients in order to grow, reproduce, make needed materials, and process waste. The cell cycle is the life cycle of the cell.						
Academic Vocabulary:	. cardiovascular, cell membrane, cell wall, cells, chloroplasts, cytoplasm, digestive, DNA, endoplasmic reticulum, excretory, golgi bodies, homeostasis, immune, lysosomes, metabolism, mitochondria, osmosis, diffusion, active transport, passive transport, cell cycle, photosynthesis, cytokinesis						
STEM Interdisciplinary Integration:	Students will be able to develop and use illustrations to describe the life cycle of a cell.						
Engaging Performance Scenario:	Actively demonstrate how particles move in and out of the cell.						
Resources: (weekly materials chosen to support teaching and learning)	Textbooks	x	Lab Materials	x	Manipulatives	X	Other: (List the other resources below.)
	Audio/Visual Aids	X	Course syllabus		Internet (Tech)	X	Interactive Notebook
	Handouts	X	Dictionaries		Electronic Devices	x	
	White Boards	X	Video Clips	X	Promethean Board	X	
Daily Lesson Plan for Monday							
Pre-Instructional Activity:	Question from previous lesson.						
Opening (ENGAGE): (introduces the lesson; summarizes previous lesson; clarifies misconceptions)	Students will be able to explain solar energy and the process of photosynthesis. They will be able to explain about cellular respiration and fermentation.						
WORK PERIOD (EXPLORE/EXPLAIN/EXTEND/ ELABORATE): (contains the mini lesson; allows students to practice concept; assesses student learning)	Students will read Chapter 4: The Cell in Action, Section 2: Cell Energy Students will read, discuss and interact with the second section of this chapter. Video shorts will be shown to demonstrate cellular respiration and photosynthesis. . Notes will be provided to be filled in by the student. Any questions answered and misconceptions resolved.						
CLOSING: (EVALUATE): (summarizes the lesson; ensures understanding, clarifies misconceptions)	Students will review vocab. Short game played with class to check for understanding.						
HOMEWORK	Notes to be completed RON. Possible additional assignment.						
Daily Lesson Plan for Tuesday							
Pre-Instructional Activity:	Question from previous lesson.						
Opening (ENGAGE):	Students will explain how they would bring life back to a baron island using the information from the previous lesson,						
WORK PERIOD (EXPLORE/EXPLAIN/EXTEND/ ELABORATE):	Students will read, discuss and take notes on Section 3: The Cell Cycle. Students will be able to demonstrate how the process works. Cell Cycle Project discussed and explained. Notes will be filled in by students. Questions answered.						
CLOSING: (EVALUATE)	Review vocab. Check for understanding.						
HOMEWORK	RON. Read over notes each night. All notes.						
Daily Lesson Plan for Wednesday							
Pre-Instructional Activity:	Question from previous lesson.						
Opening (ENGAGE):	The Cell Cycle demonstration						

WORK PERIOD (EXPLORE/EXPLAIN/EXTEND/ ELABORATE):	The students will continue to read, discuss and take notes on Section 3: The Cell Cycle. Students will create a cartoon based on the cell cycle which will show their understanding of the concepts.	
CLOSING: (EVALUATE)	Review for understand and any misconceptions. Short game to test knowledge.	
HOMEWORK	RON. Possible Pop Quiz coming up.	
Daily Lesson Plan for Thursday		
Pre-Instructional Activity:	Question from previous lesson.	
Opening (ENGAGE):	Baylor University video will be watched on the cell cycle.	
WORK PERIOD (EXPLORE/EXPLAIN/EXTEND/ ELABORATE):	Continue with the cell cycle and the cell cartoons in class. Any misconceptions and misunderstanding will be clarified.	
CLOSING: (EVALUATE)	Quick vocab review game.	
HOMEWORK	RON	
Daily Lesson Plan for Friday		
Pre-Instructional Activity:	Question from previous lesson.	
Opening (ENGAGE):	Cell cycle reminder	
WORK PERIOD (EXPLORE/EXPLAIN/EXTEND/ ELABORATE):	Finishing up of cell cartoons with presentations.	
CLOSING: (EVALUATE)	Vocab review	
HOMEWORK	RON TEST NEXT THURSDAY	
Differentiated Instruction (content, process, product)		Assessment Evidence (formative, summative)
Students with stronger understanding will work with those still having trouble with the concepts. Additional enrichment work for those ahead of the others.		Pop quiz. Last Scientist Standing and/or Trivia Game to check for understanding.
<i>Adapted from the DCSD RCD Aligned Lesson Plan Template 8.31.17</i>		

Additional Resources as Needed

in the areas below, place an "x" in the boxes to indicate selected strategies and resources										
Research Based Instructional Strategies: (weekly strategies chosen to guide teaching and learning)	OPENING: Engaging instructional activity	Activate Prior Knowledge	x	Questioning (Raises questions)	x	Clarify Previous Lesson	x	Phenomenon	x	
		Provide Feedback	x	Scaffold Instruction	x	Create Interest	x	Other:		
	WORK PERIOD: Exploring, Explaining, Extending, and Elaborating	Facilitate Learning	x	Academic Discussions	x	Cooperative Learning	x	Other:		
		Demonstrate/ Model	x	Generating and Testing Hypotheses		Independent Learning	x	Other:		
		Explain/Apply/ Extend concepts and skills	x	High-Level Questioning	x	Interdisciplinary Writing		Other:		
	CLOSING: Evaluating	Summarize Lesson	x	Provide Alternate Explanations		Respond to EQs		Other:		
		Allow students to assess their own learning	x	Quick Write		3-2-1/K-W-L		Other:		
	Intervention Strategies									
	Intervention Strategies (Tiers 1, 2,3) Additional Support in the Classroom	Specifically Designed Instruction for the Exceptional Education Students	Strategies for English Language Learners							
	Re-voicing	Conferencing	Visuals/ Realia							
Explaining	Additional time	Front-loading								
Prompting for participation	Small group collaboration	Echoing/Choral Response								
Challenging or countering	Modify quantity of work	Color-coding								
Asking "Why?" "How"	Take student's dictation	Multiple exposures in different media								
Reread	Scaffold Information	Pair-share								
Practice new vocabulary	Differentiated content/process/product	Modeling								
Assistive technology	Consistent reward system	Language scaffolds: eg, sentence frames								
Pre-teach & re-teach in a different way	Refer to student's IEP or 504 Plan	Deconstruct complex sentences								
Use of manipulatives	Assistive technology	Increase student-to-student talk								
Collaborative work		Strategies vocabulary instruction								
Create differentiated text sets		Additional Think Time								
Gifted-Extensions for Learning										
Tier 1										
Flexible-Learning Groups	Varied Pacing with Anchor Options	Varied Supplemental Materials								
Choice of Books	Work Alone or Together	Computer Mentors								
Homework Options	Flexible Seating	Think-Pair-Share								
Use of Reading Buddies	Varied Scaffolding	Open-Ended Activities								
Various Journal Prompts	Varied Computer Programs	Explorations by Interest								
Student/Teacher Goal Setting	Design-A-Day									
Tier 2										
Gifted Educ Cluster Classes	Alternative Assessments	Community Mentorships								
Gifted Educ Collaboration Classes	Subject Advancement within class	Stations								
Tiered Activities and Products	Curriculum Compacting	Group Investigations								
Use of Literature Clubs	Tiered Centers	Assess Students in Multiple Ways								
Multiple Testing Options	Spelling by Readiness	Student Choice								
Multiple Texts	Varying Organizers	Simulations								
Tier 3					Tier 4					
Advanced Content(all core content)					Above grade level accelerated (all core content)					
Resource Classes					Advanced Placement Classes					
Independent/Directed Study					International Baccalaureate Classes					
Socratic Seminars					Internships/Mentorships					
21st Century Learning Skills: (weekly strategies chosen to guide student engagement)	Teamwork and Collaboration		Innovation and Creativity			Accessing and Analyzing Information				
	Initiative and Leadership		Critical Thinking and Problem-Solving			Effective Oral and Written Communication				
	Curiosity and Imagination		Flexibility and Adaptability			Other:				